

Mail Stop 6010

May 2, 2006

John F. DeBernardis, Ph.D.  
Chief Executive Officer  
Applied NeuroSolutions, Inc.  
50 Lakeview Parkway, Suite 111  
Vernon Hills, IL 60061

**Re: Applied NeuroSolutions, Inc.  
Schedule 14A, Amendment 1  
Filed April 25, 2006  
File No. 1-13835**

Dear Dr. DeBernardis:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

SCHEDULE 14A

General

1. We note you provided us with a letter containing the following representations:
  - the Company is responsible for the adequacy and accuracy of the disclosure in the filing;

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- staff comments or changes to disclosure in response to staff comments do not foreclose the Securities and Exchange Commission (the “Commission”) from taking any action with respect to the filing; and
- the Company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please file the letter as correspondence on EDGAR.

Proposal 3, page 19

2. We note your response to comment 8. Please disclose any known information about the next capital-raising transaction, such as the timing, type of transaction, and size. Alternatively, if true, disclose you plan to do a capital-raising transaction in the near future, but you have not yet determined any of the terms.

\* \* \*

As appropriate, please amend your filing and respond to these comments within 10 business days or tell us when you will provide us with a response. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

You may contact Greg Belliston at (202) 551-3861 or me at (202) 551-3715 with any questions.

Sincerely,

Jeffrey Riedler  
Assistant Director

cc: Adam Eilenberg, Esq.  
Ehrenreich Eilenberg & Krause LLP  
11 East 44th St., 17th Floor  
New York, New York 10017